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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/042,823	11/13/2001	John Gardner	10015462-1	7322

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
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EXAMINER

MARTIN, LAURA E

ART UNIT PAPER NUMBER

2853

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/042,823

Applicant(s)

GARDNER ET AL.

Examiner

Laura E. Martin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12, 15-29 and 31-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-12, 15-29, 31-34 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Election/Restrictions*

This application contains claims directed to the following patentably distinct species:

Species I, drawn to a method of printing comprising selecting between a dark dot gain print mode and an object definition print mode, wherein the dark dot gain print mode comprises applying at least one dark color ink to a dry portion of a print media and applying at least one light color ink to said portion of the print media that is still wet following said application of the dark color and wherein printing in the object definition mode comprises applying at least one light color to a dry portion of the print media and applying at least one dark color ink to the portion of the print media that is still wet from the application of the light color (for example, as in presently disclosed claims 1-12, and 15-23); and

Species II, drawn to a printing device containing an ink jet printing mechanism configurable to selectively apply at least two different color inks to a print media; and logic operatively coupled to the ink jet printing mechanism and configured to select between a dark dot gain print mode and an object definition print mode, wherein the dark dot gain print mode comprises applying at least one dark color ink to a dry portion of a print media and applying at least one light color ink to said portion of the print media that is still wet following said application of the dark color and wherein printing in the object definition mode comprises applying at least one light color to a dry portion of the

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print media and applying at least one dark color ink to the portion of the print media that is still wet from the application of the light color (for example, as in presently disclosed claims 24-29 and 31-42); and

Species III, drawn to a method comprising determining dot gain requirements and selectively altering an ink application order based on the determined dot gain requirements (for example as in presently disclosed claim 44).

If applicant elects Species I for examination, there is a need to further restrict between claims 1-12, and 15-23.

This application contains claims directed to the following patentably distinct sub-species of the claimed invention:

1. Sub-Species 1a, drawn to selecting between at least two print modes is based on content to be printed by the print media (for example, as in presently disclosed claims 4 and 8); and

Sub-Species 1b, drawn to selecting between at least two print modes is based on a parameter associated with the inks (for example, as in presently disclosed claims 5 and 9); and

Sub-Species 1c, drawn to selecting between at least two print modes is based on a parameter associated with the print media (for example, as in presently disclosed claims 6 and 10); and

Sub-Species 1d, drawn to selecting between print modes by distinguishing photos and graphics (for example, as in presently disclosed claim 17); and

Sub-Species 1e, drawn to selecting between print modes based on identifying a type of an area to be printed (for example, as in presently disclosed claim 18).

2. Sub-Species 2a, drawn to an amount of dark color ink that is greater than an amount of light color ink (for example, as in presently disclosed claim 15); and

Sub-Species 2b, drawn to an amount of light color ink that is greater than an amount of dark color ink (for example, as in presently disclosed claim 16).

If applicant elects Species II for examination, there is a need to further restrict between claims 24-29 and 31-42.

This application contains claims directed to the following patentably distinct sub-species of the claimed invention:

1. Sub-Species 3a, drawn to logic selecting between at least two print modes is based on content to be printed by the print media (for example, as in presently disclosed claim 25); and

Sub-Species 3b, drawn to logic selecting between at least two print modes is based on a parameter associated with the inks (for example, as in presently disclosed claim 26); and

Sub-Species 3c, drawn to logic selecting between at least two print modes is based on a parameter associated with the print media (for example, as in presently disclosed claim 27).

2. Sub-Species 4a, drawn to a dark color having a greater amount of colorant than a light color (for example, as in presently disclosed claims 28 and 33); and

Sub-Species 4b, drawn to a dark color having less colorant than a light color 9for example, as in presently disclosed claims 32).

3. Sub-Species 5a, drawn to logic configurable to identify a type of area to be printed (for example, as presently disclosed in claim 36); and

Sub-Species 5b, drawn to logic configurable to identify types of media and ink (for example, as presently disclosed in claim 37); and

Sub-Species 5c, drawn to logic configurable to establish print map data defining said printing sequence (for example, as presently disclosed in claim 38).

4. Sub-Species 6a, drawn to logic configurable within a printing device; and

Sub-Species 6b, drawn to logic configurable within a computer device.

The species are independent or distinct because they each have a unique structure, creating a burdensome search.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin

  
12/7/06  
MANISH S. SHAH  
PRIMARY EXAMINER